
Federal Managers' Financial Integrity Act Report

Executive Summary

Introduction

The Department of Energy serves the Nation by helping to provide for a more secure and sustainable energy future, supporting national defense, improving our environmental quality, and advancing American science and technology. In keeping with the Administration's commitments, we are focused on accomplishing these missions in a manner that provides the best, most cost-effective service possible for the American people.

The Department is accomplishing its mission within the constraints of the budgetary resources and programmatic changes mandated by Congress. We have undergone the difficult task of downsizing our work force through office consolidations, business process reengineering, and elimination of nonessential activities. We are building on past successes and improving our management as we move forward. As emphasized in our prior two reports, it is important to maintain an environment conducive to a strong system of management controls in these times of change. Standards for management controls established by the Comptroller General indicate a relationship between the control environment and organizational stability, employee knowledge level, and adequacy of both supervision and oversight activities. Evaluation of our management controls against those standards suggest that we be alert to potential deficiencies. The Department is facing a rapidly changing mission and organization, a loss of in-house expertise and supervision due to the departures of senior managers, and significant budget and staffing reductions that have adversely affected employee morale. This requires us to be ever cognizant of the need to mitigate the effect the adversities we are facing may have on the soundness of our management controls.

Background

The objective of the Federal Managers' Financial Integrity Act of 1982 (Act), as implemented by the Office of Management and Budget, is to create a process whereby managers and employees may freely identify for the President, Congress, and ultimately the public, areas of vulnerability in the operations of Government and, as a consequence, ensure that appropriate attention is given to ameliorating problems that may affect the wise expenditure of the taxpayers' money. To be successful, the process must rely on a climate of open and honest dialogue about the nature and extent of our problems, as well as a realistic assessment as to the potential for and means of their cure.

In accordance with the Act, the Department has completed the required evaluations of its management controls in effect during the fiscal year ended September 30, 1997. Our evaluations included an assessment of whether the management controls of the Department were in compliance with the standards prescribed by the Comptroller General. The purpose of these evaluations was to provide reasonable assurance that the management controls were working effectively, that program and administrative functions were performed in an economical and efficient manner consistent with applicable laws, and that assets were safeguarded against the potential for waste, fraud, abuse or mismanagement.

SUMMARY OF REPORTABLE PROBLEMS

Our management control evaluations disclosed nine reportable problems. This reflects the closure of the problem at our Strategic Petroleum Reserve we have reported in past years. In addition, this year we have separated the previously reported contract/project management problem into two problems--contract management and project management. In addition to the nine reportable problems, we have identified three issues that are emerging as potential problems in the future.

Following is a description of our reportable problems and the emerging issues we have identified, as well as our ongoing efforts to correct them.

Environmental Compliance

The Department continues to face significant long-term environmental compliance and waste management problems at its facilities. Many of these problems are the result of activities conducted under less stringent standards than today's. Recent developments related to groundwater contamination at Brookhaven National Laboratory and Hanford have highlighted the need for firm action to address these environmental compliance issues and the public concerns that may arise. Circumstances dictate that immediate attention be given to evaluating and correcting the impacts of past practices and characterizing and minimizing the possible adverse impacts of present and future activities.

Paramount to the resolution of these problems is the development of realistic schedules and resource requirements needed to bring DOE facilities into compliance with Federal and State requirements, remediate contaminated sites, and safely dispose of radioactive waste. Actions taken to address specific problems have included the cleanup of 10 geographic sites in fiscal year 1997, bringing the total number completed to 60 of the 133 sites currently included in the Environmental Management program. A Programmatic Environmental Impact Statement was issued in 1997 to provide a framework for implementing the waste management program. The Department is currently implementing a new vision designed to accelerate the cleanup of a significant number of the remaining sites by 2006. The 2006 Plan vision calls for reducing the overall life-cycle costs of cleanup while maintaining the Department's commitment to be in full compliance with all applicable environmental and legal requirements. To address the groundwater problem, the Under Secretary is undertaking an initiative to provide an integrated assessment of the scientific methods used to study groundwater contamination and the methods used to define site priorities and programs. Also, the DOE Action Plan for Improved Management at Brookhaven National Laboratory was developed to ensure that noted deficiencies are corrected.

Many of the Department's compliance agreements with states were originally negotiated when the production of nuclear weapons was a key mission and the availability of environmental management data to make informed decisions was minimal. Consequently, the deadlines and expectations of the original agreements were not realistic and have required renegotiations. The Department's renegotiations with states required consideration of Federal budget constraints and were vital to bringing facilities into compliance with environmental requirements. The Department has completed negotiations with 34 of the 35 sites where DOE generates or stores

mixed waste. Completed renegotiations have resulted in corrective action plans that are linked to funding availability and identify short-term and long-term commitments. A site treatment plan for the one remaining site has been developed and a schedule of negotiations to finalize the agreement is being established by the regulating agency.

The Department's efforts are focused on finding methods to remediate environmental problems cheaper and faster, through the new accelerated approach being identified in the year 2006 Plan. However, the final resolution of these problems is both long-term and costly. The Department is committed to achieving compliance with all applicable environmental requirements and bringing waste sites and facilities into regulatory compliance.

Safety and Health

Comprehensive reviews performed by the Department's line managers have disclosed nuclear and occupational safety and health deficiencies that impair our ability to ensure the health and welfare of both workers and the public. These deficiencies include: outdated nuclear safety standards; vulnerabilities in the safe storage of spent nuclear fuel and other materials; nonconformance with basic Occupational Safety and Health Administration standards; vulnerabilities in the Department's bioassay program; and a lack of compliance with Conduct of Operations requirements at the Department's facilities.

The Department has taken a number of steps to address these inadequacies. A rolling five- year plan was published which identifies resources and priorities for safety and health improvements on an ongoing basis. Nuclear safety standards are being upgraded and oversight evaluations are being conducted to ensure adequate implementation of conduct of operations requirements related to safety and health functional areas. Currently the Department has completed 395 of the proposed 526 corrective actions identified by the Spent Fuel Working Group that assessed the safety of our storage practices for spent nuclear fuel and other materials. Also, seven oversight evaluations were conducted in FY 1997 including the integrated safety management evaluation at the Brookhaven National Laboratory. An Enhanced Work Planning initiative is being implemented, which encourages management and workers to cooperatively plan work activities encompassing all aspects of work performance, including worker safety and health and Occupational Safety and Health requirements. This is a move toward integrating worker safety at the work planning level.

The correction and reduction of the number and severity of safety and health deficiencies will be evaluated through the performance of internal and external assessments. The Department will continue its efforts to implement the safety and health upgrades and in turn restore public confidence in our ability to safely operate our facilities.

Nuclear Waste Storage and Disposal

The Department's schedule for permanent disposal of spent nuclear fuel, high-level and transuranic radioactive waste generated by individual nuclear utilities and the weapons complex experienced delays resulting from local opposition and related litigation and previous funding shortfalls. The Department aggressively pursued these problems through multiple initiatives.

The opening of Waste Isolation Pilot Plant (WIPP) for defense-generated transuranic radioactive waste requires the Department to demonstrate completion of legislative prerequisites and compliance with regulations. In 1996, the WIPP Land Withdrawal Act was amended with streamlining provisions that communicated the sense of Congress that DOE should begin disposal operations at WIPP as early as November 1997, provided that all prerequisites are complete. Since enactment of the WIPP Land Withdrawal Amendment Act, the Department has based its plan on opening WIPP in November 1997. However, a six-month delay in the opening date for WIPP from November 1997 to May 1998 has occurred. The revised opening date reflects: (1) the EPA schedule for reviewing and evaluating the Department's application and completing the rulemaking by April 1998; and (2) the State of New Mexico's expected schedule for issuing its final permit.

In accordance with Congressional direction, resources are being focused on core scientific studies that will resolve the remaining major technical questions about geologic disposal of spent nuclear fuel at Yucca Mountain, Nevada. In 1997, the Department completed excavation of the main loop of the underground Exploratory Studies Facility on schedule. The Exploratory Studies Facility and the seven associated test alcoves offer scientists direct access to key geologic features of the host rock and allow them to conduct scientific experiments that will yield data required to resolve the remaining technical questions. In accordance with Congressional direction, the Department is focusing its efforts on completion of a site viability assessment in 1998.

In 1997, a coalition of State agencies and nuclear utilities sued the Department as a result of its earlier announcement that it anticipates it will be unable to begin accepting spent nuclear fuel for disposal by January 31, 1998. The court held that DOE may not excuse its delay in accepting spent nuclear fuel as unavoidable on the grounds that neither a permanent repository nor an interim storage facility is operational. The Department is studying the Court's decision.

The Department will continue to pursue the goals of permanent and safe storage and disposal of the Nation's nuclear waste within its funding limitations and Congressional direction.

Contract Management

The Department is seeking to reform its contracting practices, which were largely unchanged for more than 50 years until the Department's contract reform initiative. The weaknesses in DOE's contracting practices were substantial and required major changes in such areas as contractor performance and accountability and oversight of contractor pension funds. To address these weaknesses, a contract reform team conducted a comprehensive review of contract management and recommended 48 specific actions dealing with such issues as increasing competition and contractor financial responsibility; improving environmental, safety, and health programs; and using better-defined statements of contractor performance expectations. The Department has now implemented many of these recommendations by taking actions that have resulted in improved standards for evaluating contractors' performance, increased contractor accountability, and routine review of contractors' pension plans.

A key aspect of the Department's contract improvement initiative was a new form of management and operating contract--the performance-based management contract. The fundamental component of this new approach was the use of performance-based contracting concepts, which emphasized more definitive statements of work, specific performance objectives and measures,

and linkage to appropriate performance incentives. However, recent audit reports and internal evaluations have highlighted problems in the development and use of performance measures and performance-based incentives in determining contractor fees. As a result, the Department conducted a comprehensive review of performance-based incentives. While this review indicated that the changes have been a positive influence in focusing contractor attention on critical technical performance, it also identified systemic problems. Based on the results of the analysis, the Deputy Secretary outlined specific tasks to further improve the Department's contract management practices including development of directives, a manual and training on the proper use of performance-based contracting and incentive fees.

In fiscal year 1997, as part of the ongoing effort in contract reform, the Department embarked on a "management and integration" procurement at Oak Ridge. The purpose of this procurement was to focus the prime contract solely on managing the work and then relying on "best in class" subcontractors, through the management and integration contractor, to execute the work. The management and integration contract was awarded in December 1997.

Another ongoing contract reform initiative is to decrease the Department's reliance on management and operating contractors and to privatize some functions by utilizing fixed-fee contracts and reaching out to a broader spectrum of the private sector than was done in the past. Privatization efforts are underway in the Department's Office of Environmental Management where it is viewed as an important means of improving technical and schedule performance and reducing costs of some major cleanup projects. While to date, the largest effort in privatization has been undertaken in the environmental management arena, other parts of the Department are beginning to explore the privatization approach. As we move forward, we are addressing the new challenges our privatization initiative brings. These include strengthening training programs for DOE staff involved in privatization initiatives; enhancing DOE cost estimating capabilities for privatization projects; and expanding and supplementing DOE expertise in reviewing privatization contract solicitations and contracts. In addition, we are committed to increasing our accountability to Congress for our privatization contracts.

In another area of contract management, the Inspector General recently identified deficiencies in the Department's controls over the use of management and operating contractor personnel to perform support service functions. The Department has taken aggressive action to correct this deficiency. Departmental policy has been issued concerning the proper use of such employees; a baseline was established and is being refined; and a requirement has been established that all assignments of management and operating contractor personnel to perform support service type activities must be approved by the Assistant Secretary for Human Resources and Administration.

Project Management

In the past, it was reported that the Department lacked discipline and structure in controlling program and baseline changes to projects and needed a Department-wide approach to certify project managers at predetermined skill levels to ensure competent management oversight of our resources. In addition, the Department needed stronger policies and controls to ensure that the need for construction projects is reevaluated frequently in light of our changing missions. While the Department has taken aggressive actions to address these past problems, confidence in our ability to effectively build new facilities or upgrade existing systems has been adversely affected by recently reported cost overruns, schedule slippages, and other project management problems. For example, a number of construction projects, such as the Chemistry and Metallurgy Research

Facilities Upgrade Project at the Los Alamos National Laboratory are experiencing cost, schedule, and technical performance problems. These issues, which have been disclosed through internal assessments and Inspector General reports, are being addressed. However, they have led to Congressional concern over the adequacy of the Department's construction project management structure and practices.

The Department is addressing these problems through improved policies and assessments. Specifically, certain improvements have been made to policies and procedures that should enable the Department to provide better oversight over contractor costs and schedules. A formal change control process and project manager certification program have been implemented. A new approach used in project management includes a process for annual evaluation of the need for construction projects currently planned or ongoing. New policy was issued that outlines a performance-based approach to project management. An evaluation is underway to assess the effectiveness of this approach. More than 30 "good practice guides" for asset management derived from industry practices have been issued. Root cause reviews are being performed at larger projects such as the Chemistry and Metallurgy Research Facilities Upgrade Project. Several ongoing or recently completed studies have addressed aspects of these problems and more studies are planned.

During fiscal year 1998, additional studies are planned to examine specific aspects of our defense-funded construction projects including overall project performance in recent years; organizational management structure, process and procedures; and personnel resources. These studies will focus on Headquarters but will also include some Field management activities. Also, the ongoing evaluation to assess the effectiveness of Department-wide policy and procedural changes will be completed. In addition, in accordance with Congressional direction, the Department is procuring services for independent assessments of ongoing and planned projects as well as construction planning and management practices.

Surplus Inventory and Facility Management

The Department has extensive inventories of nuclear and nonnuclear materials, personal property, land, and facilities that are no longer necessary due to the end of the Cold War or related Departmental mission changes. The Department could save storage, security, maintenance and handling costs associated with these assets. In the case of weapons-usable fissile materials, a danger exists, not only in the potential global proliferation of nuclear weapons, but also in the potential for environmental, safety and health consequences if surplus fissile materials are not properly managed. The Department needs to verify required inventory levels and ensure proper storage and disposition of excess nuclear materials throughout the complex. In addition, the Department must ensure materials inventory systems, such as the International Nuclear Analysis, provide information needed by customers.

The Department continues to focus on the mission of reducing surplus nuclear and nonnuclear materials and assets through various initiatives and priority actions. The Office of Fissile Materials Disposition remains in the forefront of defining and implementing a path forward for the safe, secure, environmentally sound storage of all weapons usable fissile materials and disposal of surplus fissile materials. In 1996, the Department decided in a Record of Decision to dispose of surplus highly enriched uranium by blending it down to a level sufficient for sale and commercial use. In a 1997 Record of Decision, the Department decided to reduce the number of sites where

plutonium is stored and to implement a hybrid strategy for disposing of surplus plutonium by pursuing both immobilization in glass or ceramic form and burning as mixed oxide fuel in existing, domestic commercial reactors. Site-specific analyses necessary to enable selections of sites(s) for surplus plutonium disposition are underway and will support a Record of Decision in late 1998. These efforts will result in the flexibility to implement plutonium disposition in a manner that encourages reciprocal action abroad. Plans are also in place to transfer 50 metric tons of surplus Highly Enriched Uranium to the United States Enrichment Corporation over a six-year period beginning in FY 1998.

Other Departmental initiatives focus on nuclear and nonnuclear materials that no longer have clearly defined or immediate uses. The Baseline Asset Inventory Initiative, a corporate-level assessment of the Department's excess physical nonnuclear assets including lands, facilities, and materials, assessed available disposition options and highlighted actions necessary to combat the Department's increasing custodial liability. The Department has also introduced a Materials and Assets Management and Disposition Steering Committee to facilitate the aligning of assets and materials with current and future missions, reduce management costs, designate excess assets including surplus facilities for sale, and promote environmental goals through innovative reclamation and recycling initiatives. This program also encompasses the Department's inactive facilities including those not yet scheduled for environmental remediation. In addition, the sale of excess nonnuclear materials continues to take place with total sales expected to reach \$75 million over four years.

Inadequate Audit Coverage

There are deficiencies in the audit coverage of the management and operating contractors, as well as non-management and operating contractors, which perform many of the major functions integral to the Department's mission. As a result of this inadequate audit coverage, the Department lacks full adequate assurance that its contractors are only being reimbursed for costs that are reasonable and allowable.

The Department has undertaken actions to improve the overall audit coverage that includes prioritizing management and operating (M&O) audits, pursuing funding reallocations, and expediting requests for and performance of audits by cognizant audit agencies responsible for auditing non-M&O contractors. An audit strategy that places more reliance on major contractors' internal audit staffs has been implemented under the oversight of a steering committee. During 1997, the Inspector General completed annual assessments of selected contractors and found all the internal audit functions to be acceptable.

Also, in 1997, the Office of Inspector General re-evaluated the audit needs of the Department and concluded that staffing and resource limitations would hinder audit efforts into the foreseeable future. The Government Management Reform Act of 1994, a major unfunded mandate, drains a significant portion of auditing manpower and consequently allows less time to conduct performance and other financial audits of the Department's programs, activities and operations. However, the Department remains committed to providing adequate audit coverage to ensure that our facilities are operating properly and effectively.

Infrastructure

Due to decades of deferred maintenance and upgrades, much of the Department's infrastructure is in poor condition. This infrastructure consists of buildings, roads, utilities, and other facilities that are vital to the operations of the Department. Unsafe conditions, lost-time delays, and more frequent and costly maintenance have resulted from deferring maintenance at our aging facilities.

The Department has initiated a long-range strategy for acquisition, maintenance, modernization, and eventual disposal of its infrastructure. This includes revising the capital asset management process to increase awareness of the long-term cost of ownership and require life cycle analysis of the existing plant. A condition assessment survey process is being used to determine the extent of deficiencies and the amount of infrastructure that needs replacement. The Department issued revised guidance for capital asset management and facilities upgrades and maintenance.

Performance agreements between Headquarters and the Field are in place to plan, track, and analyze trends for maintenance activities. The Department deployed a Functional Cost Reporting System, which will include maintenance data at a summary level from the Field. Upon acceptance and final revisions, this action will be complete. The Department envisions a safe, modern, efficient energy complex as a result of implementation of planned corrective actions.

Property Controls

Inadequate control over Government personal property by the Department's management and operating contractors has been identified as a deficiency at some of the Department's facilities. This property includes nuclear-related technology equipment, vehicles, construction equipment, computers, tools, and other items. The deficiencies identified include missing property, risk of unauthorized use, and improper disposal. These problems have resulted from inadequate policies and procedures as well as lack of adequate attention to contractor personal property management systems.

To remedy this situation, steps are being taken to strengthen Departmental policies and provide increased emphasis on property management by contractors. The Department's property management policies are being revised to include extensive coverage of high risk property and address critical problems identified by audits and investigations. The proposed rule (revision) was published in the Federal Register and issuance of the final rule is expected by March 1998. Personal Property Systems Reviews have been replaced with a Value Based Self-Assessment Process for contractors to assess their systems and identify needed improvements. The only significant remaining action is to issue the final rule which will formally revise the Department's policies.

EMERGING ISSUES

In addition to the above reportable problems, our management control evaluations identified three issues that are emerging as potential problems. We are taking actions to address these issues and prevent them from becoming future reportable problems. Last year we reported an emerging issue regarding insufficient funding for security clearance investigations. I am pleased to report

that the funding issue was resolved in our 1998 appropriation and we are not reporting this as a problem.

National Security

Security concerns in the Department are focused in two primary areas: counterintelligence and physical safeguards. These areas of concern were identified in internal and external reviews and have been the subject of adverse news coverage.

Counterintelligence. The counterintelligence concern results from the large and increasing number of foreign nationals visiting the Department's laboratories and the potential for compromise of classified information or other sensitive or proprietary information. The Department's laboratories have desirable assets, in the form of classified information, as well as unclassified but sensitive information, and access by foreign nationals, even for a short time, can provide the opportunity to identify and target laboratory information. In addition, repeated and long-term contact between laboratory personnel and foreign nationals can create relationships that foreign countries can use to extract information. Additionally, the threat has become more complex because information and cutting edge technology of economic benefit is of great importance to all countries; consequently, there is the risk of economic espionage by enemies and allies alike. The Department recognizes that there are inadequacies in the counterintelligence program and has taken steps to strengthen it. At the direction of the Under Secretary, a plan was prepared to develop (1) training in export control and technology; (2) new guidance on sensitive subject matters; (3) laboratory threat assessments of their foreign visitors and assignments program; and (4) a comprehensive threat assessment of foreign visitors and their assignments programs. In addition, Congress appropriated an additional \$5 million for counterintelligence support in 1998.

Physical Safeguards. Concerns with the Department's physical safeguards focus on the deterioration of our security posture in key areas. The key areas affected include protective force staffing, readiness exercises and training, physical security upgrades, security technology applications and construction of special nuclear material storage facilities. Factors driving deterioration of the Department's security have been cited as: fewer security officers; less able personnel; poor oversight and budgeting; and aging facilities. These factors are the subject of ongoing discussions within the Department regarding the appropriate level of funding for safeguards activities. As a result of the safeguard and security issues, the Deputy Secretary's office is chairing a Safeguard and Security Council with representation at the Assistant Secretary level. The Deputy Secretary has also commissioned a review of all sites' safeguards and security programs. This review would be led by technical experts from the Sandia National Laboratory and is scheduled to be complete in fiscal year 1998. In response to concerns regarding the Department's program, Congress has directed us to establish the Energy Security Management Board to perform assessments of security throughout the nuclear-weapons complex and issue annual reports and policy guidance to the President and Congress. The Department will continue to monitor the program throughout FY 1998.

Declining Oil Import Protection

The United States is bound by treaty to maintain strategic inventories of petroleum, either Government or privately held, equivalent to 90 days of net imports. In direct response to the

OPEC oil embargo of 1973-74, the creation of a Strategic Petroleum Reserve of up to one billion barrels of oil was authorized, and since then we have built 750 million barrels of storage capacity and acquired as much as 592 million barrels of oil. It is the only contingency program, outside of military response, that the United States has available to respond to international energy supply disruptions.

In 1985, the Reserve provided 118 days of import protection. However, since that time imports have risen, no oil purchases have occurred for the Reserve since 1994, and as part of budget-balancing efforts, Congress has directed us to sell oil in each of fiscal years 1996-1998. At the end of 1996, the inventory of the Reserve equated to only 67 days of imports, and that measure is projected to keep falling as imports increase and oil sales from the Reserve occur. Moreover, the protection afforded by private industry inventories is declining. As calculated by the International Energy Agency, the United States has 85 days of private inventories that may be counted toward its obligations. While still substantial, inventories have trended down since 1981, culminating in a very large drop in 1995 of 100 million barrels, equal to about 10 percent of total private inventories. These reductions have occurred as demand has risen by 2.5 million barrels per day over the same period. The result is that the number of days of coverage provided by private inventories has dropped significantly.

The continuing decline in the number of days of net imports held in the Reserve could jeopardize our national energy security and the U.S.'s ability to meet its treaty obligations. While the U.S. can rely on privately held stocks to satisfy its treaty obligation, the Reserve is the only direct deterrent to politically motivated disruptions. U.S. international leadership in this area, and the deterrent effect of the Reserve depend upon our maintaining the Reserve of Government-held stocks at the 90-day net import level.

Workforce Realignment

Staffing deployment remains a significant challenge at the Department of Energy due to budget constraints. In recent years, the Department lost a significant number of staff resulting from budget induced reductions in force, buyouts, the need to comply with mandated hiring freezes, and other attrition in critical program areas. Collectively, these created a need to redeploy staff, realign functions, retrain employees, and take other actions to maintain a viable, highly skilled workforce. While we are confident that we can operate within available resource limitations, there are problems with service in the context of this downsizing. In response, the Department will authorize critical hiring, redeploy employees, and retrain existing staff where necessary. These actions coupled with the existing management systems to support staffing decisions should help to alleviate workforce realignment issues in the future.

SUMMARY OF PRIOR REPORTABLE PROBLEM

In the past, the Department identified a reportable problem related to the Strategic Petroleum Reserve. As a result of corrective actions taken, this problem is no longer considered reportable. Specific actions taken to resolve it are discussed below.

Strategic Petroleum Reserve

During the 1992-1995 time frame, internal evaluations identified conditions at some of the Department's Strategic Petroleum Reserve storage facilities that impacted the Department's ability to safely store and drawdown oil over the long term. Geotechnical problems included surface water intrusion into the Weeks Island Mine and higher than normal gas content and elevated temperatures at the Bayou Choctaw, Big Hill, Bryan Mound, and West Hackberry storage caverns. The Weeks Island problem posed risks to the structural integrity of the mine in which the oil was stored. Problems with higher than normal gas in the stored oil and the elevated temperatures reduced near-term oil drawdown capability.

The Department undertook multiple initiatives to address these problems and restore full drawdown capability. After exhaustive geotechnical investigations, the Department decided to relocate the Weeks Island crude oil inventory to the Bayou Choctaw and Big Hill storage sites and decommission the Weeks Island Mine. In the process of making this decision, the Department performed an environmental review pursuant to the National Environmental Policy Act with two public meetings for enhanced public participation. In December 1995, the Department published an Environmental Assessment and issued a Finding of No Significant Impact. The mine was stabilized with a freeze wall and brine injection to control groundwater inflow and the crude oil inventory relocation was essentially completed by the end of October 1996. In November 1996, the Department commenced filling the mine with brine to assure geological stability. As of the end of FY 1997, 33.2 million barrels of brine had been introduced into the oil storage chamber and initial oil skimming operations recovered 1.75 million barrels of residual oil. In August 1997, the contract for removal of surface and subsurface facilities was awarded and work is proceeding along with follow-on residual oil skimming operations.

The Department performed comprehensive analyses to determine the volume of oil requiring treatment at each site affected by excess gas and elevated temperature. The Department ensured that degasification operations were safe and developed criteria for the eventuality of an emergency drawdown occurring during degasification. In order to reduce the elevated temperatures affecting the Reserve's crude oil inventory, heat exchangers have been installed at three sites and the exchangers for Big Hill are planned to be mechanically operational by April 1998.

Oil degasification was completed at West Hackberry and Bayou Choctaw during FY 1996 and at Bryan Mound in December 1997. As a result of degasification operations, the inventory availability for normal drawdown has been increased to 555 million barrels, 99 percent of the total inventory, at an initial drawdown rate of 3.7 million barrels per day.

The Department is confident that the Strategic Petroleum Reserve is operationally capable of continuing long-term operations in a reliable, safe, and environmentally sound manner. As a result of these significant actions to improve the Department's ability to safely store and drawdown oil, Strategic Petroleum Reserve is no longer considered a reportable problem.

OVERALL RESULTS OF EVALUATIONS

The results of the management control evaluations conducted to date, assurances given by senior officials, and other information such as independent audit reports and self-assessments, indicate

that the system of management controls of the Department of Energy in effect during the year ended September 30, 1997, taken as a whole, provides reasonable assurance that the management control objectives were achieved except for the reportable problems identified in this report. The concept of reasonable assurance recognizes that management controls must be cost effective and that some potential for undetected errors or irregularities always exists.

Additionally, as required by Section 4 of the Federal Managers' Financial Integrity Act, an evaluation of the Department's Financial Management System was conducted. The evaluation was made in accordance with guidance issued by the Office of Management and Budget. The objective was to determine the overall conformance of the Department's Financial Management System with the principles and standards prescribed by the Comptroller General and the Office of Management and Budget Circular A-127, "Financial Management Systems," requirements. The evaluation included a review of last year's evaluation and related corrective actions and a review performed by system managers of all components of the Department's Financial Management System. The results of this evaluation and assurances provided by system managers indicate that the Department's Financial Management System is in general conformance with the prescribed requirements, except for the reportable nonconformance discussed below.

SUMMARY OF REPORTABLE NONCONFORMANCE

Our financial management systems evaluations disclosed a reportable nonconformance. The following describes the nonconformance and our ongoing efforts to correct it.

Financial Management Systems Improvements

Recommendations from a GAO report, the Department's Contract Reform initiative, and the National Performance Review indicated that current Departmental information systems do not provide the kinds of financial information needed to manage contractors and programs effectively. Departmental financial management systems are outdated and must be upgraded to capture and produce financial information required to measure program and financial management performance. In order to address identified deficiencies, the Department has established a separate Corporate Systems group within the Office of the Chief Financial Officer to plan and support current and future financial system requirements and has initiated efforts to implement an Executive Information System (EIS). Actions taken during FY 1997 to implement an EIS included interviewing and surveying customers and stakeholders to determine key information data elements, designing an EIS prototype system, and implementing the EIS Pilot system for Headquarters and Field Office staff utilization. Further expansions to the EIS capabilities will be conducted during FY 1998. The Department has also developed a Financial Data Warehouse to address customer needs for obligation and cost data and established a Functional Cost Reporting System to provide managers with information on contractor support costs and assist in assessing contractor progress in managing support costs.

STATUS OF YEAR 2000 ACTIONS

Although not a reportable problem or financial system nonconformance for the Department, the impact of the year 2000 on federal information systems is an important issue government-wide. For this reason, we are providing you with the status of our actions to address the impact of the year 2000 on the Department's information systems. In addressing this issue, we have established critical milestones reflecting government-wide requirements that encompass the more than 440 mission-essential systems the Department maintains.

In October 1997, the Department completed the milestone for assessing the situation by identifying systems and establishing plans for achieving compliance with year 2000 requirements. In addition, we have established the following Departmental completion dates: renovation of the existing computer code to accommodate the year 2000 by September 1998; validation of the new computer code by February 1999; and implementation by March 1999. The Department's current estimate to obtain year 2000 compliance is \$130.1 million.

Additionally, our November progress report to OMB indicated the Department had completed renovation for 13 percent of the systems being modified. OMB informed us that the Department was in the bottom five of all agencies. To reverse this trend, the year 2000 issue is being closely monitored by the Department's Executive Committee for Information Management. The Deputy Secretary chairs this committee and members include senior information management and program officials from across the Department. As a further check and balance, the issue is being monitored by the Departmental Internal Control and Audit Resolution Council which includes selected senior managers, including the Inspector General.

We are moving ahead in our efforts to address the impact of the year 2000 in the Department's information systems and expect successful completion of our actions.